# "Lasers for Life" – A Laserlab-Europe Foresight Workshop, 2-4 June 2014, Royal Society, London, UK



### Monday 2<sup>nd</sup> June 2014

**12:30** Meeting open for registration

**13:30** Welcoming remarks by Claes-Göran Wahlström (Laserlab-Europe) and John Collier (STFC Central Laser Facility)

#### Scientific Session 1: Medical Imaging, Diagnosis, and Therapy (Part 1)

14:00	Plenary: <u>Serge Mordon (INSERM, Lille, France)</u>	Laser applications in medicine
15:00	Sally Ibbotson (Dundee, UK)	Phototherapy, photodiagnosis
15:30	Adrian Podoleanu (Kent, UK)	Master/Slave optical coherence tomography
16:00	Coffee break	
16:30	Katarina Svanberg (Lund, Sweden)	Lasers for Oncology
17:00	Samantha Hills (Lynton Lasers, UK)	Lasers for cosmetic therapy
17:30	Vasilis Ntziachristos (IBMI, Munich, Germany)	In vivo targeted fluorescence
18:00	Carsten Philipp (Evangelical Elisabeth Clinic, Germany)	Laser surgery, endoscopy
18:30	Drinks reception, poster session, commercial exhibition	, and networking opportunity
19:30	Dinner	
22:00	Departure for hotels	

### Tuesday 3<sup>rd</sup> June 2014

**14:00** Paul Dumas (Soleil, France)

**14:30** Elizabeth Duke (Diamond Light Source, UK)

15:00 Richard Abel (Imperial College, UK)

#### Scientific Session 2: Medical Imaging, Diagnosis, and Therapy (Part 2)

09:00	Plenary: Brett Bouma (Harvard, USA)	Lasers for medical imaging
10:00	Fiona Lyng (Dublin Inst of Technology, Ireland)	Laser spectroscopy for diagnosis
10:30	Coffee break	
11:00	Colin Hopper (UCL, UK)	PDT for head & neck cancer
11:30	Katalin Hideghety (Szeged, Hungary)	Future applications of laser driven ionizing radiation
Scientific Session 3: Complementary approaches forward look (Synchrotrons, FELS, and High Power Lasers)		
12:00	Plenary: Henry Chapman (DESY, Germany)	FELs for structural biology
13:00	Lunch	

Synchrotrons & lasers in the IR

Correlative X-ray & laser microscopy

High power lasers for medical imaging

## Scientific Session 4: Future Applications of Laser Spectroscopy & Imaging for Biological and Medical Research (Part 1)

16:30	Plenary: Ernst Stelzer	Ruchmann Inst. Germa	any) Advanced liv	ght microscopy
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**17:30** Christian Eggeling (Oxford, UK) STED microscopy

**18:00** Neil Hunt (Strathclyde, UK) 2DIR of proteins & peptides

**18:30** Drinks, poster session, commercial exhibition, and networking opportunity

**19:30** Dinner

22:00 Departure for hotels

#### Wednesday 4th June 2014

## Scientific Session 5: Future Applications of Laser Spectroscopy & Imaging for Biological and Medical Research (Part 2)

09:00	Susan Quinn (UCD, Ireland)	Ultrafast spectroscopy of nucleic acids
09:30	Marisa Martin-Fernandez (STFC, UK)	Single Molecule techniques in cells & tissues
10:00	Maria Garcia Parajo (ICFO, Spain)	Single Molecule Biophotonics
10:30	Erwin Peterman (VU Amsterdam, NL)	Super-resolution & Optical Tweezers
11:00	Coffee break	

#### Scientific Session 6: Horizon Scanning – Exploration of emerging areas

11:30	Maria Farsari (IESL-FORTH, Greece)	2.5D and 3D printing of biomedical implants
12:00	Aleksandr Ovsianikov (Vienna Uni. of Technology)	Laser-based tissue engineering
12:30	Michael Hausser (University College London)	Optogenetics
13:00	Ken Ledingham (Strathclyde, UK)	Opportunities for international collaboration in laser therapy

13:30 Lunch

14:30 Discussion forum: Presentations from policy leaders and open discussion with delegates

15:30 Closing remarks

**16:00** Workshop ends















